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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,458	07/01/2003	Scott Johnston	06119.00007	1628

22908   7590   05/08/2006

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EXAMINER
KYLE, CHARLES R

ART UNIT	PAPER NUMBER
3624	

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/611,458	JOHNSTON ET AL.
	Examiner	Art Unit
	Charles Kyle	3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>06 January 2006</u>.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-35</u> is/are pending in the application.

    4a) Of the above claim(s) <u>16-22</u> is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☐ Claim(s) _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date *12/9/03, 3/25/05, 12/10/03*

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Election/Restrictions

Claim16-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as

being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on January 6, 2006.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. The form of the equation is ambiguous because it is unclear to which

power the quantity "ChgUnderlyingPrice" is raised. Two interpretations are:

$$ChgUnderlyingPrice^{(2*gamma)}$$

- exponent is 2 multiplied by gamma

And

$$(ChgUnderlyingPrice^{(2)}) * gamma$$

- exponent is 2 and, quantity $(ChgUnderlyingPrice^{(2)})$ is multiplied by gamma

The ambiguity precludes application of prior art in a rejection. Applicant is advised to

add no new matter if amendment is done to overcome this rejection.

Claim 9 recites the limitation "the hedge product transaction" in limes 1-2. There is

insufficient antecedent basis for this limitation in the claim.

Claims 14 and 15 recites the limitation "the order risk date" in limes 1-2. There is

insufficient antecedent basis for this limitation in the claim. The language of the Claims is also

unclear, because if one assumes that the intended phrase is "the order risk data", then executing a

transaction having some variant of the number of contracts identified in (i) would cause

excessive risk, which is illogical. The phrasing precludes application of art in a rejection.

Examination is done to the best of the Examiner's ability given the condition of the

Claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5, 9, 12-13, 23-24, 25-26, 28-29, 31 and 33-35 are rejected under 35 U.S.C.

103(a) as being unpatentable over US 2003/0097328 *Lundberg et al.*

Regarding Claim 1, *Lundberg* discloses the invention substantially as claimed including

in a method of hedging risks associated with the purchase of a variable defined derivative

product (paras. 2-12), the method including steps of:

(a) executing at a match system a variable defined derivative product order (para 38);

(b) receiving order risk data from an order risk management module(paras 41-42);

(c) locating a potential hedge transaction that corresponds to the derivative product order (paras. 34-37);

(d) comparing data of the potential hedge transaction to the order risk data (para. 34); and

(e) executing the potential hedge transaction when a rule is not violated (para. 34).

Lundberg does not specifically disclose using a best efforts approach to find a potential hedge transaction corresponding to a derivative product order. Official Notice is taken that it was old and well known at the time of the invention to perform such best efforts to find hedge transactions. For example, cross-hedging between different underlying commodities or hedging using products having different deliver/take delivery dates was well known. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Lundberg* to include a best efforts feature to identify a "close but not exact" match of a hedge product corresponding to a derivative product order.

As to Claim 2, although *Lundberg* discloses updating of prices of variable defined derivative products at para/ 47, it does not specifically disclosed calculation of the price. *Makvic* discloses such a calculation at Abstract, Background of the Invention and Summary of the Invention, at least. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Lundberg* with the option pricing disclosed by *Makvic* because this

would facilitate the hedging of *Lundberg* through the risk management and portfolio hedging

methods specifically disclosed by *Makvic* at Col. 2, lines 19-55 and Col. 3, lines 39-61.

Regarding Claim 3, *Lundberg* further discloses an original price, updated underlying

product price and a price determination variable at para. 47.

As to Claim 5, *Lundberg* discloses order risk data as delta at paras. 6-9, at least.

Regarding Claim 9, *Lundberg* discloses inclusion of both order elements in one order at

para. 34.

As to Claim 12, Official Notice is taken that it was old and well known to maintain

constant risk for investments at the time of the invention. For example, portfolio rebalancing

considering risk data was often done to maintain a constant level of risk after an initial set of

portfolio transactions. It would have been obvious to one of ordinary skill in the art at the time

of the invention to modify *Lundberg* to maintain constant risk after a transaction to provide risk

commensurate with trader risk tolerance.

Regarding Claim 13, *Lundberg* discloses that risk data not be exceeded before the

transaction at para. 34.

As to Claim 23, see the discussion of Claims 1 and 3.

As to Claim 24, see the discussion of Claims 23 and 2.

As to Claim 25, *Lundberg* discloses formulae at paras.. 27-32.

Regarding Claim 26, see the discussion of Claims 3 and 23.

As to Claim 28, *Lundberg* discloses a common search system as a common trading

exchange at para. 25.

As to Claim 29, *Lundberg* suggests locking at para. 47.

As to Claim 31, see the discussion of Claim 23 and 9.

As to Claim 33, see the discussion of Claim 23 and *Lundberg* further discloses

computer-readable media storing instructions to perform the method of claim 23 at Fig. 1 and

para. 25.

As to Claims 34-35, see the discussion of Claims 1 and *Lundberg* further discloses

computer-readable media storing instructions to perform the method of claim 23 at Fig. 1 and

para. 25.

Claims 6, 8 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US

2003/0097328 *Lundberg et al* in view of Applicants' Admission of Prior Art.

As to Claim 6, *Lundberg* discloses the invention substantially as claimed. See the

discussion of Claim 1. *Lundberg* does not specifically disclose use of gamma as a risk

management metric. Applicants admit this fact as prior art at para. 6 of the Specification. It

would have been obvious to one of ordinary skill in the art at the time of the invention to modify

include the use of gamma admitted by Applicants in the method of *Lundberg* because this would

provide a common and convenient tool for risk management.

As to Claim 8, *Lundberg* discloses the invention substantially as claimed. See the

discussion of Claim 1. *Lundberg* does not specifically disclose that the derivative product is an

option and the hedges product comprises a futures contract. Applicants admit this fact as prior

art at para. 8 of the Specification. It would have been obvious to one of ordinary skill in the art

at the time of the invention to modify include the feature admitted by Applicants in the method

of *Lundberg* because this would provide a common and convenient tool for risk management of options trades.

As to Claim 30, see the discussion of Claims 23 and 8.

Claims 7, 10-11 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2003/0097328 *Lundberg et al* in view of *Dictionary of Finance and Investment Terms*, hereinafter *Dictionary*.

As to Claim 7, *Lundberg* discloses the invention substantially as claimed. See the discussion of Claim 1. *Lundberg* does not specifically disclose that different match systems (markets) are used for variable defined derivative product order and hedge transaction. *Dictionary* discloses this concept as arbitrage at pages 27-28. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify include the arbitrage of *Dictionary* in the method of *Lundberg* because this would provide access to broader markets and promote efficiency, as disclosed by *Dictionary*.

Regarding Claim 10, *Dictionary* discloses fill or kill trades at page 201. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Lundberg* with fill or kill trade capability to maintain market price stability.

Regarding Claim 11, *Dictionary* discloses fill or kill trades as partial delivery at page 433. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Lundberg* with fill or kill trade capability to provide as substantial a hedge capacity as was available..

As to Claim 32, see the discussion of Claims 23 and 7.
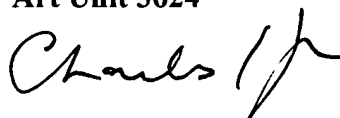
Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Charles Kyle whose telephone number is (571) 272-6746. The

examiner can normally be reached on 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Vincent Millin can be reached on (571) 272-6747. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

crk   **Primary Examiner**
May 2, 2006   **Charles Kyle**
                                                     Art Unit 3624